

This quiz is worth 10 points, and you have 10 minutes to complete it.

Calculators are NOT allowed today.

1. (4 pts) Determine whether each of the following statements is true (T) or false (F).

(a) **T** **F** Every power function is a polynomial function.

(b) **T** **F** Every polynomial function is a power function.

(c) **T** **F** Every polynomial function is a rational function.

(d) **T** **F** Every linear function is a polynomial.

2. (6 pts) Write the function $f(x) = |x^2 - 3x - 4|$ as a piecewise function where each piece is defined on an *interval* of x -values. Show your work clearly and in order.